ventec INTERNATIONAL GROUP

VT-901N

Version: 29/09/2023 /40 /41 /42

Polyimide No Flow / Low Flow Prepreg

General Information

Polyimide Low and No Flow product using Ventec's VT-901N resin technology with an epoxy component for flow control and enhanced bond strength designed for use in polyimide rigid-flex applications.

- Improved for high layer count rigid-flex
- Tg 200˚C
- Low Z-CTE
- Meets IPC-4101E Specification sheets /42
- Compatible with Lead Free processing

Storage Condition

		Prepreg	
Storage Condition	Temperature	< 23˚C (73˚F)	< 5˚C (41˚F)
	Relative humidity	< 55%	/

Availability

Product	Type	Glass Fabric	Resin Content	Flow Range (mil)	(mm)	Pressed Thickness (mil/ply)	(mm/ply)
VT-901N Polyimide Tg 200˚C	106 NF	106	64%	10~50	0.25~1.25	1.8	0.046
	1080 NF	1080	60%	10~50	0.25~1.25	2.8	0.071
	106 LF	106	65%	60~120	1.5~3	1.9	0.048
	106 LF	106	68%	60~120	1.5~3	2.1	0.053
	1080 LF	1080	62%	60~120	1.5~3	3.1	0.079

Note: * Built on IPC-TM650 2.3.17.2

Properties Sheet of Pressed No Flow Prepreg

Test Item		Test Method (IPC-TM-650)	Unit	Typical Value
Tg	TMA	2.4.24	˚C	200
Td	TGA	ASTM D3850	˚C	390
Electric Strength		2.5.6.2	KV/mm	54
Peel Strength with 1oz Cu	As Received	2.4.8	Lb/in	8-9
	After Thermal stress			8-9
Peel strength with CVL		2.4.8	Lb/in	7
Moisture Absorption	D24 / 23	2.6.21	%	0.20
	After PCT	1atm., 121˚C, 1hour	%	0.22
X,Y-axis CTE	30~125˚C	2.4.24	ppm/˚C	12~15
Z-axis CTE	Before Tg	2.4.24	ppm/˚C	50
	After Tg		ppm/˚C	230
	50~260˚C		%	2.5
Thermal Stress	Solder dip at 288˚C	2.4.13.1	Second	>300
Breakdown Voltage	D48/50+ D0.5/23	2.5.6	KV	>60
Arc Resistance	D48/50+ D0.5/23	2.5.1	Second	150
Dk (RC60% at 1GHz)	C24/23/50	2.5.5.9	_	3.8
Df (RC60% at 1GHz)	C24/23/50	2.5.5.9	_	0.015

All test data provided are typical values and not intended to be specification values.

VT-901N

Version: 29/09/2023 /40 /41 /42

Polyimide No Flow / Low Flow Prepreg

Press Condition

	VT-901N
Heating rate of materials	2.5-3.5˚C/min (4.5~6.5˚F/min)
Cure Temperature	≥190˚C
Cure Time	>90min
Vacuum should be continued until over 140˚C (284˚F) [Material Temperature]	
Pressure on materials: Start with 100psi, Full pressure: 250~450psi	
Cold Press: Keep Plate @ Room Temperature by water; Pressure:100psi; Dwell Time: 60minutes	

Contact Ventec technical service to discuss the specific condition.